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NOTICE OF PREPARATION OF A DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETING

CSLC EIR No.: 752
Project: Truckhaven Competitive Geothermal Lease
CSLC Ref Files: W40848
SCH# 2009061111

Date: June 26, 2009

To: Public Agencies and Interested Parties

Project: The California State Lands Commission (CSLC) will prepare a Programmatic Environmental Impact Report (PEIR) to analyze the impacts associated with the leasing of state lands for the purpose of geothermal energy production within the Truckhaven Geothermal Leasing Area in Imperial County.

Applicant: ORMAT Nevada, Inc.
Attn: Charlene Wardlow
Environmental / Regulatory Affairs Administrator
6625 Neil Road, Suite 300
Reno, NV 89511

Location: The Truckhaven Geothermal Leasing Area is located west of the Salton Sea, in the area approaching the intersection of State Route 86 and State Route 78, in Imperial County. See Figures 1 and 2.

Project Description:

The CSLC has received applications for prospecting permits pursuant to Public Resources Code section 6910 and a nomination by ORMAT Nevada (the Applicant), requesting that the CSLC conduct a competitive lease sale pursuant to Public Resources Code section 6911 and Title 2 California Code of Regulations, section 2249 for geothermal resources underlying lands within the Truckhaven Geothermal Leasing area in Imperial County.

A Final Environmental Impact Statement (EIS) was prepared by the Bureau of Land Management (BLM) for lands within the Truckhaven Geothermal Leasing Area (SCH

Number 2007024001). The EIS is available at http://www.blm.gov/ca/st/en/fo/elcentro/truckhaven.html. The Truckhaven EIS determined that to produce power in commercial quantities, State and/or private lands would be needed in addition to the Federal Lands. The CSLC worked with the BLM so that the EIS could be used a basis to meet the requirements of the CEQA for the leasing of State lands. The CSLC will be the Lead Agency under the California Environmental Quality Act (CEQA), and will prepare a Programmatic Environmental Impact Report (PEIR) for this project. The PEIR will address those issues that are required by CEQA but were not required by NEPA and therefore not analyzed in the Truckhaven EIS, as described in CEQA Guidelines section 15221 subsection (b). The PEIR will base its evaluation on the reasonably foreseeable development (RFD) scenario as described in the EIS and appropriate alternatives.

Purpose of Public Scoping Process:

The purpose of this Notice of Preparation/ Notice of Public Scoping Meeting is to obtain agency and the public's views as to the scope and content of the environmental information and analysis, including the significant environmental issues, reasonable range of alternatives, and mitigation measures that should be included in the draft PEIR. Applicable agencies will need to use the PEIR when considering related permits or other approvals for the Project.

The Project description, location, and potential environmental effects are discussed in the attached Scoping Document. Due to the time limits mandated by State law, written comments must be sent by **July 27, 2009.** Please send your comments at the earliest possible date to:

Sarah Mongano, Environmental Scientist
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
FAX: (916) 574-1885 E-mail: mongans@slc.ca.gov

NOTE: You are encouraged to submit electronic copies of your comments in Microsoft Word format. If comments are faxed or sent by e-mail, please also mail a copy to ensure that a clean copy is received by this office.

Pursuant to Section 15083, Title 14, California Code of Regulations, the CSLC will also conduct two public scoping meetings for the proposed Project to receive oral or written testimony at the time and place listed below:

DATE: Monday, July 20, 2009
TIME: 3:30 p.m. and 6:30 p.m.
LOCATION: County Administration Center
Board Chambers
940 West Main Street, Suite 211
El Centro, CA. 92243

If you have any questions or would like a copy of this notice or additional information, please contact Sarah Mongano at the above address, by phone (916) 574-1889, or e-mail at mongans@slc.ca.gov. Copies of this Notice and other information will also be available at the public scoping meeting and on the CSLC web page: www.slc.ca.gov.

Signature: _____ Date: _____

Sarah Mongano
Environmental Scientist

TRUCKHAVEN COMPETITIVE GEOTHERMAL LEASE SCOPING DOCUMENT

1. PROJECT DESCRIPTION

The CSLC has received applications for prospecting permits pursuant to Public Resources Code section 6910 and a nomination by ORMAT Nevada (the Applicant), requesting that the CSLC conduct a competitive lease sale pursuant to Public Resources Code section 6911 and Title 2 California Code of Regulations, section 2249 for geothermal resources underlying lands within the Truckhaven Geothermal Leasing area in Imperial County. The CSLC owns a fee interest in approximately 1,189 acres and a reserved mineral interest in another 3,085 acres. The California Department of Parks (CDPR) is the surface owner for most of those reserved mineral interest lands. The CDPR has a fee interest in an additional 543 acres in another section. The CSLC may lease the subsurface minerals on lands where the surface is owned by another State agency, but only with the consent of that agency, and subject to reasonable terms and conditions as may be prescribed by that agency (Public Resources Code section 6924). A few acres are owned by Caltrans along Highway 86. The total area within the Truckhaven Geothermal Leasing Area for which the CSLC has jurisdiction for leasing geothermal resources is approximately 4,817 acres. The sections of land to be evaluated include four sections totaling 2,394 acres nominated for leasing by ORMAT Nevada (4-11S-10E, 10-11S-10E, 16-11S-10E, and 36-10S-9E) and four additional state sections totaling 2,423 acres (34-10S-9E, 35-10S-9E, 35-11S-9E, and 36-11S-9E) in the Truckhaven geothermal leasing area (see Figure 2).

A Final Environmental Impact Statement (EIS) was prepared by the Bureau of Land Management (BLM) for lands within the Truckhaven Geothermal Leasing Area (SCH Number 2007024001). The EIS is available at http://www.blm.gov/ca/st/en/fo/elcentro/truckhaven.html. The Truckhaven EIS determined that to produce power in commercial quantities, State and/or private lands would be needed in addition to the Federal Lands. The CSLC worked with the BLM so that the EIS could be used a basis to meet the requirements of the CEQA for the leasing of State lands. The CSLC will be the Lead Agency under the California Environmental Quality Act (CEQA), and will prepare a Programmatic Environmental Impact Report (PEIR) for this project. The PEIR will address those issues that are required by CEQA but were not required by NEPA and therefore not analyzed in the Truckhaven EIS, pursuant to CEQA Guidelines section 15221 subsection (b). These issue areas include a greenhouse gas analysis consistent with AB 32; growth inducing impacts; cumulative impacts; literature and database searches for cultural resources and biological resources on State parcels identified for potential lease; mitigation measures to reduce all potential environmental impacts including all environmental impacts addressed in the EIS; and a Mitigation Monitoring Plan (MMP).

The PEIR will base its evaluation on the reasonably foreseeable development (RFD) scenario as described in the EIS and appropriate alternatives. In the RFD scenario, it is anticipated that up to two power plants would be built to utilize the resources from the Truckhaven Geothermal Leasing Area. Each power plant would be capable of generating 25 megawatt (MW) (net) of electricity. Given what is currently known about the resource, the power plants would likely utilize binary power generation to produce electricity. It is possible, however, that a flash generation system could be used, possibly

in conjunction with the binary plants to maximize the amount of energy produced. Until more information is gathered during the exploratory phase, the precise technology that would be used is unknown.

In order to support 50 (MW) (net) of geothermal production, the EIS estimated that 50 wells would need to be drilled for production and reinjection. Wells would be permitted using standard review methods to ensure protection of groundwater, protection of public safety, and the prevention of undue or unnecessary degradation of the environment. The EIS used the existing geothermal development at East Mesa (located east of El Centro) as a model and adjusted for a potential lower-quality resource (i.e., lower temperature), and determined that 50 MW (net) of power would eventually require 25 production wells and 25 injection wells. Each well would require a well pad of approximately two acres.

This PEIR will only cover leasing the land and will not evaluate any ground disturbing activities. Any physical exploration of geothermal resources or subsequent physical development of geothermal resources will require additional CEQA review as described in the CEQA Guidelines section 15168 subsection (c).

1.1 Project Location

The Truckhaven Geothermal Leasing Area is located west of the Salton Sea, in the area approaching the intersection of State Route 86 and State Route 78, in Imperial County.

1.2 Project Objective

To analyze the impacts associated with the leasing of state lands for the purpose of geothermal energy production within the Truckhaven Geothermal Leasing Area in Imperial County.

1.3 Permits and Permitting Agencies

In addition to action by the CSLC, the proposed Project will require permits and approvals from reviewing authorities and regulatory agencies. These include, but are not limited to:

- U. S. Environmental Protection Agency;
- U. S. Fish and Wildlife Service;
- Bureau of Land Management;
- State Water Resources Control Board;
- California Department of Fish and Game;
- California Department of Parks and Recreation;
- California Department of Transportation; and
- Imperial County.

2. ALTERNATIVES

In accordance with Section 15126.6 of the CEQA Guidelines (California Governor's Office of Planning and Research 2001), an EIR must "describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most the basic objectives of the Project, but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the

alternatives." The State CEQA Guidelines also require that a No Project Alternative be evaluated, and that under specific circumstances, an environmentally superior alternative be designated from among the remaining alternatives.

2.1 ALTERNATIVES PROPOSED FOR CONSIDERATION

As required under the CEQA, the EIR will include a discussion of the proposed Project and the No Project Alternative. Under the No Project Alternative, no geothermal production within the leased areas would occur. Additional alternatives may be developed based on information received during the public scoping process and as a result of the environmental analysis.

3. SCOPE OF EIR

Pursuant to State CEQA Guidelines section 15060, the CSLC staff conducted a preliminary review of the proposed Project. Based on the potential for significant impacts resulting from the proposed Project, a PEIR was deemed necessary. This PEIR will address those issues that are required by the CEQA but were not required by NEPA, and those issues that require a more detailed analysis under the CEQA, and therefore were not analyzed in the Truckhaven EIS, pursuant to CEQA Guidelines section 15221 subsection (b). CSLC staff has identified the following issues to be addressed in the PEIR including:

- A greenhouse gas analysis, consistent with AB 32;
- Cumulative impacts;
- Growth inducing impacts;
- Literature and database searches for cultural resources and biological resources on State parcels identified for potential lease;
- Mitigation measures to reduce all potential environmental impacts including all environmental impacts addressed in the EIS; and
- A Mitigation Monitoring Plan (MMP).

Air Quality/ Greenhouse Gas Analysis
The EIS did not include an analysis for the impacts of greenhouse gases (GHGs) consistent with the California Global Warming Solutions Act (AB 32) because the analysis was required by the CEQA but not required by NEPA. The PEIR will include a GHG analysis as required by the CEQA.

Impacts from well drilling and other construction activities would result from exhaust emissions from construction equipment and particulate emissions as a result of soil disturbance. Particulate emissions would also be generated from use of the unpaved access roads. Because geothermal power plants do not burn fuel like fossil fuel plants, they release virtually no air emissions. Up to two geothermal power facilities would generate very small amounts of air emissions but could replace up to 50 MW of energy supplied by fossil fuel power facilities.

Biological Resources

The EIS addressed impacts to biological resources for the entire Truckhaven Geothermal Leasing Area. The PEIR will contain a more specific discussion of the potential impacts to biological resources on State parcels identified for potential lease.

The proposed Project site supports habitat for several special status plants and animals. These species, as well as their habitats, could potentially be disturbed or harmed during both construction activities and ongoing geothermal production. Until there is a defined project with precise methods and proposed locations identified, specific impacts cannot be precisely determined.

Cultural Resources

The EIS addressed impacts to cultural resources for the entire Truckhaven Geothermal Leasing Area. The PEIR will contain a more specific discussion of the potential impacts to cultural resources on State parcels identified for potential lease.

It is likely that the proposed Project would impact cultural resources associated with Ancient Lake Cahuilla. These resources range from habitation sites, flaking stations, temporary campsites, fishing weirs or traps, ceramic scatters and occasional rock cairns. Cremated burials have also been found. Microfossils, shells, and plant fragments can be expected within the proposed lease areas. Vertebrate fossils have not been identified in the Project area but are found in the Anza-Borrego Desert State Park to the west. Given the nature and extent of these paleontological resources, impacts to potential fossil localities can be expected. Direct impacts to cultural and paleontological resources can potentially occur wherever there are ground-disturbing activities. These impacts are most substantial during the exploration and development phases, such as during construction of the power plants, well sites, access roads, pipeline routes, and transmission lines. Impacts can also occur during operation and maintenance and during the closeout phase due to additional ground disturbance from plant removal and rehabilitation. It is possible to abate some of the disturbance by moving the location of the wells, structures and access roads to avoid impacting sites. If this is not possible then testing and data recovery excavations can be undertaken.

Cumulative Impacts

The CEQA requires an examination of the potential for a Project to have cumulative impacts when considered in conjunction with other Projects proposed and/or approved within a region. This issue area was addressed in the EIS but not analyzed to the level required by the CEQA, so the PEIR will contain a more detailed discussion of cumulative impacts of the proposed Project. The Cumulative Projects Study Area for this Project is presently defined as proposed and approved projects in Imperial County.

Growth-Inducing Impacts

The CEQA requires a discussion of the ways in which a proposed Project could be an inducement to growth. The State CEQA Guidelines (section 15126.2(d)) identify a project to be growth-inducing if it fosters or removes obstacles to economic or population growth, provides new employment, extends access or services, taxes existing services, or causes development elsewhere. This issue area was addressed in the EIS but not analyzed to the level required by the CEQA, so the PEIR will contain a more detailed discussion of potential growth-inducing impacts of the proposed Project.

4. ISSUE AREAS ADDRESSED IN THE EIS

The following issue areas were fully addressed in the EIS and will not be addressed a second time in the PEIR, pursuant to CEQA Guidelines section 15221 subsection (b). However, because NEPA does not require a separate discussion of mitigation measures or a Mitigation Monitoring Plan (MMP), mitigation measures will be included in the PEIR for all of the issue areas, including those listed below. The MMP will also include measures for all issue areas pursuant to CEQA Guidelines section 15097.

Aesthetics –
Power plant cooling towers would be the tallest and most visible part of the power plants, as they would be approximately 45 feet tall and would release a condensate plume that, under some atmospheric conditions, would extend much further into the sky and be visible for miles from the power plants. Assuming the power plants would occur near existing wells, they would not be visible from high-sensitivity viewpoints (along SR-78).

Agricultural Resources –
There are no agricultural resources within the area of potential effect of the proposed Project.

Geology and Soils
Based on the Alquist-Priolo maps, recent fault rupture has not been mapped on BLM-administered land within the Truckhaven Geothermal Leasing Area. The closest recent fault rupture mapped is about four miles from the southeast and southwest corners of the proposed action area. However, substantial shaking due to earthquakes may be expected in this seismically active area. Geothermal power plant structures would need to be designed to withstand ground motions.

Geothermal exploration, drilling, and development would be subject to stormwater measures contained in a Stormwater Pollution Prevention Plan (SWPPP) and would include other BMPs as required by the General Construction Activity Stormwater Permit issued by the California State Water Resources Control Board. Due to the lack of rain in the area, the risk associated with soil erosion would be low, but also subject to measures in the SWPPP.

Hazards and Hazardous Materials
Impacts to human health and safety from geothermal energy development could include the introduction of hazardous materials during exploration and production drilling, storage and use of petroleum and other hazardous materials at facilities, increased traffic on local roads by construction and well field workers' personal vehicles, and other risks inherent in industrial facilities. Project-related hazards potentially include accidental releases of fuel, oil, or hydraulic fluids from the construction equipment. A Spill Prevention, Control and Countermeasure Plan (SPCCP) will be prepared for the proposed Project as required by the Storm Water Pollution Prevention Plan (SWPPP) and would include action measures to minimize the potential for accidental releases of hazardous materials into the environment. The Applicant would follow all applicable hazards and hazardous materials regulations for the use, transportation, or disposal of hazardous materials.

Hydrology and Water Quality
Geothermal exploration and development is not expected to significantly alter the existing drainage patterns because grading the project would not require significant landform

modification. The RFD scenario development of wells, pipelines, and power facilities could cause indirect impacts to surface or groundwater quality due to a pipeline rupture, leakage, or failure from a surface impoundment or well casing leakage. Any facilities related to geothermal exploration and development would be designed with appropriate standards to protect against such releases.

The construction activities associated with geothermal exploration and development have the potential for adverse impacts to surface water quality, especially through erosion of disturbed soil from stormwater. A Storm Water Pollution Prevention Plan (SWPPP) would be required and would include action measures to minimize the erosion of disturbed soil. The new impervious surfaces of the permanent facilities, such well pads and power plants, would be a relatively minor source of increased surface runoff and would not substantially change runoff characteristics.

Land Use and Planning –
The Project does not conflict with any adopted land use plans, policies or ordinances, planning efforts to protect the recreational resources of an area, or habitat conservation plan or natural community conservation plan.

Mineral Resources –
No known solid mineral production has occurred in the proposed action area, and no Surface Mining and Reclamation Act classification has been designated in Imperial County. Oil and gas production is not anticipated within the potential lease area. While mining for sand and gravel has occurred in the past, there are no currently open mines, and geothermal development does not result in loss of availability of these resources.

Noise –
Geothermal exploration and development would generate some noise but would not expose noise-sensitive land uses to new noise sources. Noise impacts would be associated with the use of construction equipment during exploration and development and subsequent operation of geothermal facilities.

Population and Housing –
Both the Coachella Valley and the Imperial Valley have most of the skills in the local work force required for geothermal plant construction. Moreover, the very high unemployment in Imperial County suggests a high local demand for new construction jobs. Similarly, a high percentage of new permanent jobs created by the Truckhaven geothermal plant is likely to be filled locally because the skills are available locally and because of the high latent demand for work.

Public Services –
The Project would not directly increase demands on or require the construction of additional fire or police facilities, school facilities, park spaces, or any other public service.

Recreation
Geothermal energy exploration, development, and operations would result in a temporary reduction in the amount of land available for recreational use and in the diminishment of users' recreational experiences on lands that remain open for recreation. Visual impacts, intermittent noise associated with construction, and the temporary loss of access for recreational use would result in a low risk of a significant and temporary effect on the

recreational experiences available. While unlikely, it is possible that some trail segments would be closed and re-routed.

According to the RFD scenario up to 405 acres would be committed long-term for geothermal development. This represents one percent of the total area within the Truckhaven Geothermal Leasing Area. Potential conflicts with Off Highway Vehicle (OHV) users would be minimized to the greatest extent possible during exploration, development, and operations. Geothermal well locations would be placed away from Western Colorado Route of Travel-designated trails to minimize potential conflicts with OHV users and their vehicles.

Transportation –
The existing road infrastructure would satisfy the increased number of workers' vehicles that would be used to develop and operate any geothermal energy production to and from the Project area.

Utilities and Service Systems –
The source and amount of water required for potential operations of two binary plants has not been defined, and the availability and quality of groundwater within the lease area is unknown. Due to the expected low quality of nearby groundwater, it is expected that water for drilling and operations would be purchased from a supplier such as the Coachella Valley Water Department or the Imperial Irrigation District (IID). The other local existing utilities and service systems such as landfills are capable of accommodating this Project.

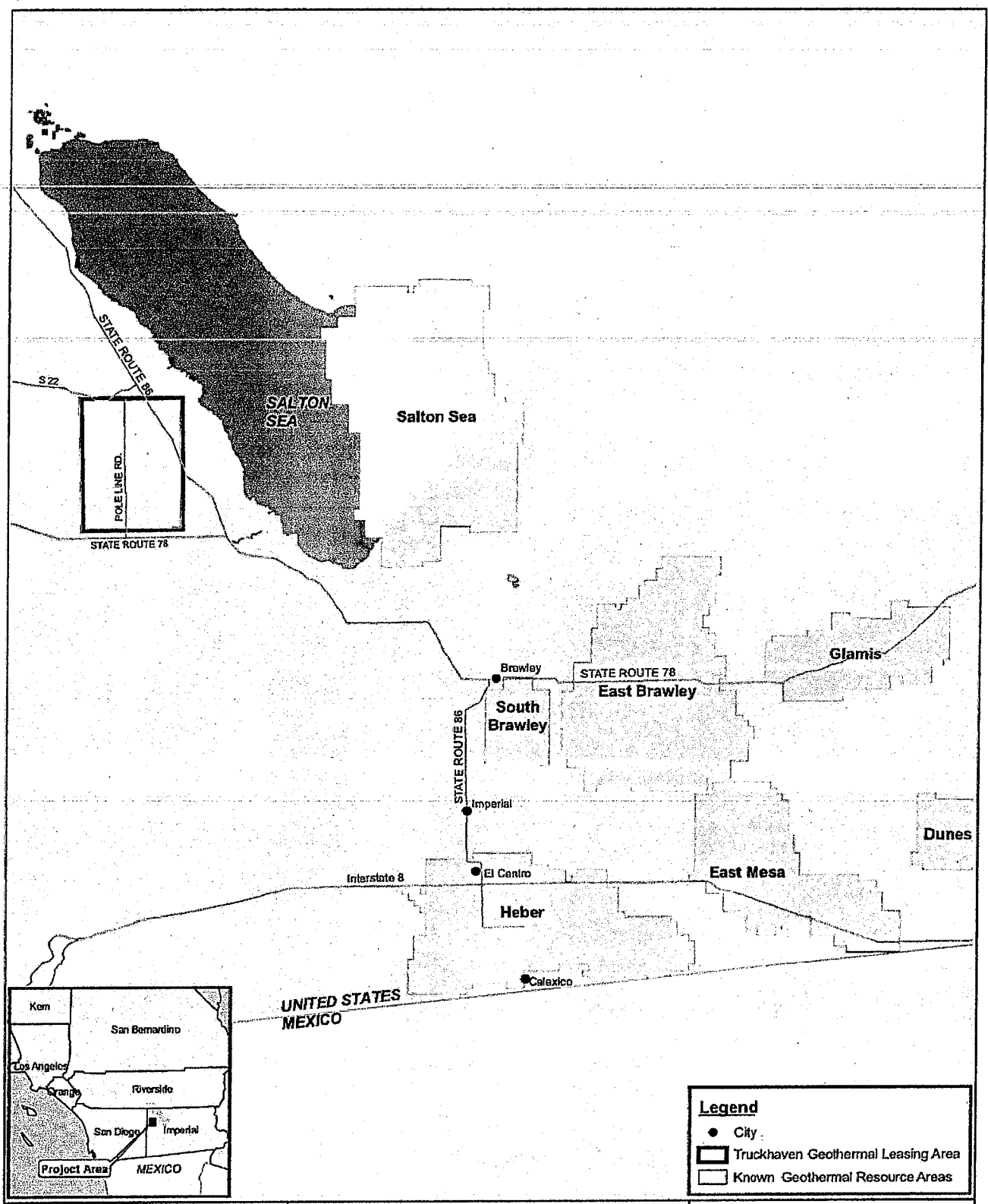
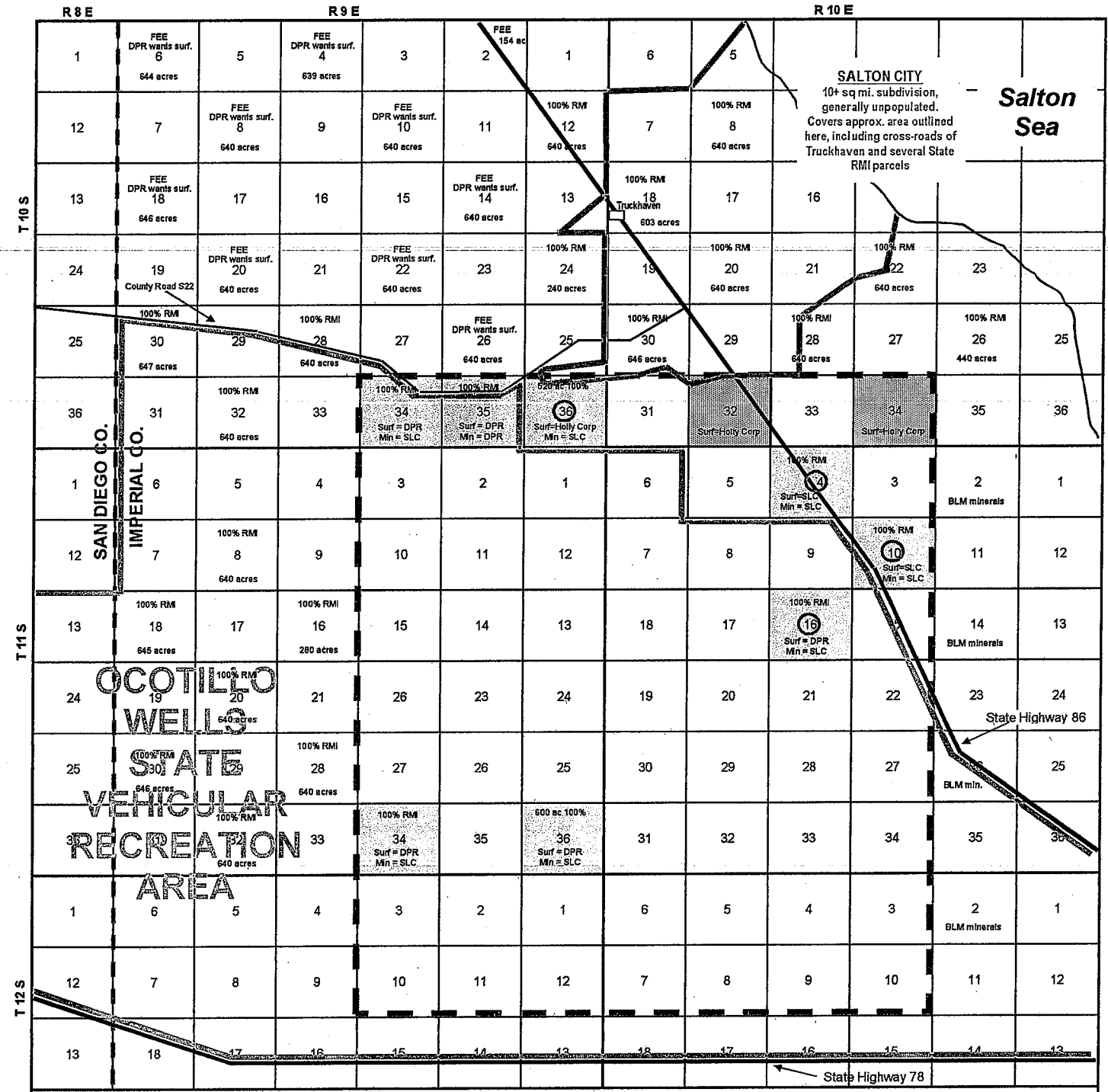


Figure 1: Truckhaven Geothermal Leasing Area Imperial County, CA



State parcels subject to PEIR

4-11S-10E: 635.81 ac Fee, 5.45 ac Caltrans, State 100% RMI; **10-11S-10E:** 553.74 ac Fee, 3.56 ac Caltrans, 82.7 ac DPR, State 100% RMI

16-11S-10E: 640 ac owned by DPR, State 100% RMI; **34-10S-9E:** 640 ac owned by DPR, State 100% RMI

35-10S-9E: 542.72 ac owned by DPR, incl. minerals, acquired from Holly; **36-10S-9E:** 473 ac Holly, 47 ac subdiv., State 100% RMI, 120 ac 1/16th

34-11S-9E: 640 ac owned by DPR, State 100% RMI; **36-11S-9E:** 640 ac owned by DPR, 600 ac State 100% RMI, 40 ac 1/16th

Applicant-nominated sections

Other parcels with questionable State interest

32 and 34-10S-10E: parcels for which mineral reservation was omitted from 1951 Patent. May not be available for leasing.

Other State parcels

Truckhaven Geothermal Leasing Area

Figure 2: State parcels* within and near Truckhaven Geothermal Lease Area

NOTE: This map is solely for purposes of generally depicting the State's ownership interest in the region and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.